

THIR UNITED STRAIFS OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Montana State Unibersity

MICCOLS, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY THARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE IGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR PRING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE PURPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT Y THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY IN SECURIOR OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321

SAFFLOWER

'Nutrasaff'

In Testimony Mucros, I have hereunto set my hand and caused the seal of the Hant Anxiety Arotection Office to be affixed at the City of Washington, D.C. this twenty-sixth day of July,

in the year two thousand and five.

on Office

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

ET SEO.)

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

	RIETY PROTECTION CERTIFICATE flection burden statement on reverse)	A. (7	pplication is required in order to deterr 7 U.S.C. 2421). Information is held co	nine if a plant variety protection certificate is to be issued niidential until certificate is issued (7 U.S.C. 2426).
1. NAME OF OWNER			TEMPORARY DESIGNATION OR EXPERIMENTAL NAME	3. VARIETY NAME
Montana State University			91B3842	Nutrasaff
4. ADDRESS (Street and No., or R.F.D. No., City,	State, and ZIP Code, and Country)	5.	TELEPHONE (include area code)	FOR OFFICIAL USE ONLY
Technology Transfer Office			(406) 994-2752	PVPO NUMBER
900 Technology Blvd, Suite 1-304	Montana Hall	6	FAX (include area code)	200500036
Bozeman, Wil 39/18	BbX 1 <i>92460</i>		(406) 994- 2895	20050000
	Masy, MT 59717 1812005 per applicant's author	ization)	(81:6/8/2005)	FILING DATE
 IF THE OWNER NAMED IS NOT A "PERSON", ORGANIZATION (corporation, partnership, asso 	GIVE FORM OF 148, IF INCORPORATED, G	#¥7E ₹ 9.	DATE OF INCORPORATION	December 14,2004
university	MT	N	Not Applicable	Decimal 14, 2001
10. NAME AND ADDRESS OF OWNER REPRESE	NTATIVE(S) TO SERVE IN THIS APPLICATION			F FILING AND EXAMINATION FEES:
	V.			E . 2/17 00
Rebecca W. Mahurin, Ph.D. Director, Office of Technology Tr	ansfer			
900 Technology Blvd, Suite A 36	4 Montana Hall; P.O.Box 1	172460		R DATE 12/14/04 CERTIFICATION FEE:
Bozeman, M1 59/18-597/7				5 432 00
(87:6/8/2005 per applicant's a	utyoxization)		·	E DATE 6/8/2005
AA TELEPHONE (L. C.			1	D 0/8/2005
11. TELEPHONE (Include area code) (406) 994-2752	12. FAX (Include area code)		13. E-MAIL	
14. CROP KIND (Common Name)	(406) 994-2893 4/52 (BT: 6/8	(2005)	research@montana.edu	N ANY TRANSGENES? (OPTIONAL)
Safflower	Compositae		YES NO	IN ANT TRANSGENES! (OPTIONAL)
15. GENUS AND SPECIES NAME OF CROP	17. IS THE VARIETY A FIRST GENERATION	N HYBRID?	IF SO, PLEASE GIVE THE AS	SSIGNED USDA-APHIS REFERENCE NUMBER FOR THE
Carthamus tinctorius L.	YES NO	TITIERIO:	APPROVED PETITION TO D COMMERICALIZATION.	EREGULATE THE GENETICALLY MODIFIED PLANT FOR
19. CHECK APPROPRIATE BOX FOR EACH ATTA	ACHMENT SUBMITTED		_	THAT SEED OF THIS VARIETY BE SOLD AS A CLASS
(Follow instructions on reverse)		. *	OF CERTIFIED SEED? (See	Section 83(a) of the Plant Variety Protection Act)
a. Exhibit A. Origin and Breeding History	of the Variety	-		lems 21 and 22 below)
b. Exhibit B. Statement of Distinctness			NUMBER OF CLASSES?	THAT SEED OF THIS VARIETT BE LIMITED AS TO
c. Exhibit C. Objective Description of Var	•		YES NO	
d. Exhibit D. Additional Description of the				☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED THAT SEED OF THIS VARIETY 8E LIMITED AS TO
e. Exhibit E. Statement of the Basis of the	·		NUMBER OF GENERATIONS	
f. Voucher Sample (2,500 viable untreate verification that tissue culture will be de repository)	d seeds or, for tuber propagated varieties, aposited and maintained in an approved public		YES NO	ER 1,2,3, etc. FOR EACH CLASS.
g. Filing and Examination Fee (\$3,652), m	ade payable to "Treasurer of the United .			
States" (Mail to the Plant Variety Protect	tion Office)		FOUNDATION L REG	GISTERED CERTIFIED essary, please use the space indicated on the reverse.)
23. HAS THE VARIETY (INCLUDING ANY HARVES FROM THIS VARIETY BEEN SOLD, DISPOSED	TED MATERIAL) OR A HYBRID PRODUCED	08	24. IS THE VARIETY OR ANY CO	MPONENT OF THE VARIETY PROTECTED BY
OTHER COUNTRIES?	on, month child, on ages in the o. a.	OK .	INTELLECTUAL PROPERTY	RIGHT (PLANT BREEDER'S RIGHT OR PATENT)?
L YES L NO	•		YES V NO	(BT: 6/8/2005 per applicant's authoriz
IF YES, YOU MUST PROVIDE THE DATE OF F FOR EACH COUNTRY AND THE CIRCUMSTA	FIRST SALE, DISPOSITION, TRANSFER, OR U NCES. (Please use space indicated on reverse.	JSE .)	IF YES, PLEASE GIVE COUNT REFERENCE NUMBER. (Pleas	RY, DATE OF FILING OR ISSUANCE AND ASSIGNED se use space indicated on reverse.)
25. The owners declare that a viable sample of basi a tuber propagated variety a tissue culture will b	c seed of the variety has been furnished with appearance of the variety has been furnished with appearance of the variety and maintaine	plication and v	will be replenished upon request in acc	cordance with such regulations as may be applicable, or for
	his sexually reproduced or tuber propagated plan			nct, uniform, and stable as required in Section 42, and is
Owner(s) is (are) informed that false represental	ion herein can jeopardize protection and result in	n penalties.		
SIGNATURE OF OWNER	^		TURE OF OWNER	
Revues W. Ma	huru			
NAME (Please print or type)	Dh D	NAME .	(Please print or type)	
Rebecca W. Mahurin,				
CAPACITY OR TITLE	DATE	I	ITY OR TITLE	DATE ,
Director	12/06/2004	·		
	The second secon			

Exhibit A: Origin and Breeding History of '91B3842' (Nutrasaff) Safflower

91B3842 (Nutrasaff) and was derived from a single F₁₁ plant selection from a 1981 multi-cross involving 'USB', 'PI 195895', 'Cargill 1653', 'Sidney Selection 87-42-3', and 'S-541' x a multi-cross involving 'Sidney Selection 87-42-3', 'AC-1', 'Sidney Selection 88-74-2', 'N-10', 'Mexican dwarf-2', 'ol35-1', 'PCM-1', and 'Arizona Pigmentless'.

USB is a normal hull linoleic oil type cultivar with resistance to Phytophthora root rot [caused by Phytopthora dreschstri (Tucker)]. Cargill 1653 is a white normal hull linoleic oil type selection made in California by Cargill, Inc. Sidney Selection 87-42-3 and Sidney Selection 88-74-2 are 1965 selections made at Sidney, MT for resistance to Alternaria leaf spot [caused by Alternaria carthami (Chow)]. These selections were made from the 1964 bulk composite of 555 safflower introductions from the 1960 world safflower collection. S-541 was developed by Seedtec International, Woodland, California and is a striped hull, linoleic acid variety. AC-1 is a linoleic oil type cultivar with a purple-striped hull and high seed oil content developed at the University of Arizona. N-10 is a white normal hull linoleic oil variety developed and released by the Nebraska Experiment Station in 1953 as an early maturing variety. Mexican dwarf-2 is a dwarf mutant selection of Indian origin obtained from the USDA world collection in 1972-73 season in Valle del Furte, Sinaloa, Mexico. ol35-1 is an oleic acid type selection for reduced hull content made in 1974 by the USDA-ARS at Shafter, California. PCM-1 is a rust resistant F₃ selection released by the USDA-ARS, Logan, Utah in 1970 from the cross PI195895 x Frio and possesses the M gene for resistance to both seedling and foliage rust. Arizona pigmentless is an experimental line obtained in 1980 from Dr. Dave Rubis, Arizona Agricultural Experiment Station with the pigmentless gene (pp) which prevents the formation of the pigmented melanin layer in the pericarp of the seed.

Recurrent selection for high seed oil, high meal protein, reduced hull content, and high linoleic fatty acid composition was practiced in the breeding of 91B3842 (Nutrasaff). Individual plant selections were made during the F_2 , F_3 , F_4 , F_5 , F_6 , F_7 , and F_8 generations.

91B3842 (Nutrasaff) Safflower Descriptors

Leaf Shape - Lanceolate

Leaf Margin - Entire

Leaf Spines - Intermediate Spineless

Leaf Hairiness - Non-Hairy

Branch Angle - Intermediate 20° to 60°

Branch Location - Predominantly on the Upper Third of the Plant

Spine Length on Outer Involucral Bract (OIB) - 2.8 mm

Spine Location on OIB - Tip and Few Basal

Number of Spines on OIB - Intermediate

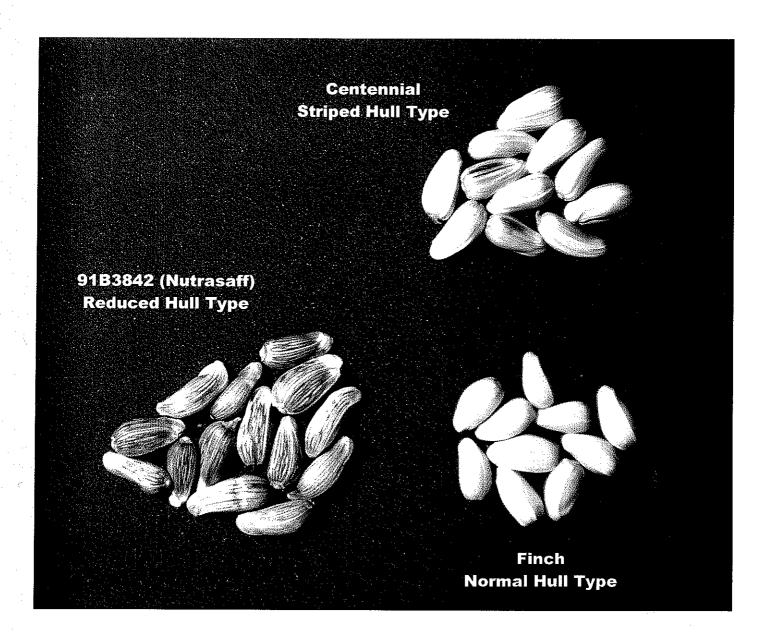
OIB Attitude - Open

Diameter of Primary Head - 31 mm (average)

91B3842 (Nutrasaff) has been stable and uniform through three generations of the breeder seed increase program. Seeds of 91B3842 have a predominantly reduced hull with an occasional white hull (<1/100). Variant.

Exhibit B: Statement of Distinctness

The most similar safflower varieties to 91B3842 (Nutrasaff) are Finch and Centennial. All of these varieties are high linoleic oil type varieties, however, 91B3842 (Nutrasaff) as shown in the descriptive information in Exhibit D has a higher seed oil content, a higher meal protein content, a lower wholeseed fiber content than both Finch or Centennial and improved disease resistance to *Alternaria* leaf spot compared to Centennial. 91B3842 (Nutrasaff) also exhibits a reduced hull seed type whereas Finch has a white normal hull type and Centennial has a striped hull seed type (see below).



UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE LIVESTOCK, POULTRY, GRAIN & SEED DIVISION NATIONAL AGRICULTURAL LIBRARY BELTSVILLE, MARYLAND 20705 OR JECTIVE DESCRIPTION OF MARIETY

EXHIBIT C (Safflower)

	OBJECTIVE DESCRIPTION OF VARIETY	
	SAFFLOWER (CARTHAMUS TINCTORIUS)	
	NAME OF APPLICANTIS	FOR OFFICIAL USE ONLY
	Montana State University	PYPO NUMBER
	ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)	
		200500036
	Technology Transfer Office	DESIGNATION TEMPORARY
	900 Technology Blvd, Suite 1304 Montana Hall	
10004	8/2005) Bozeman, MT 59718-RD. Box 172460; Bozeman, MT 59717	nutrasaff 415/03
(O1+ 0)		The state of the s
	Place the appropriate number that describes the varietal character of this variety in the Place a zero in first box (e.s. 0 8 9 or 0 9) when number is either 99 or less or 1. MATURITY (From Emergence):	boxes below. 9 or less.
	2 Location: 1 = CALIFORNIA & ARIZONA 2 = MIDWEST	1 2 0 NO. OF DAYS TO MATURIT
•	0 2 NO. OF DAYS EARLIER THAN 4	
	NO. OF DAYS LATER THAN	US-10 4=Centennial
	2 Maturity Class: 1 = EARLY (less than 110 days) 2 = MEDIUM EARLY (110 to 3 = MEDIUM LATE (121 to 130 days) 4 = LATE (more than 130	120 days)
	3 = MEDIUM LATE (121 to 130 days) 4 = LATE (more than 130 2. PLANT HEIGHT AT MATURITY:	OBYS)
•		
	0 5 5 cm. HEIGHT 0 cm. SHORTER THAN	[4_] /
		1 = GILA 2 = FRIO 3 = US-
	O CM. TALLER THAN	4) 4=Centennial
	3. FLOWER COLOR:	
	10161 1000 01 = William	sh Flower Wilted Flower
		ANGE LIGHT RED
	02 - LIGHT FELLOW GREYISH-WHITE 00 - DE	DDISH ORANGE DEEP RED
	03 - LIGHT-ORANGE BASE ORANGE RASE	LLOW BASE & TIPS
	04 - TELLOW YELLOW (US-10) OF	LOBES ORANGE · · · · · ORANGE
	05 = YELLOW LIGHT ORANGE BASE 10 = PAI	E-YELLOW PALE-YELLOW
-		IER (Specify)
	4. SPINES ON INVOLUCRAL BRACTS:	
	2 1 = ABSENT 2 = PRESENT	
	2	
	[
	3 Location: 1 = TIP ONLY 2 = TIP & FEW BASAL 3 = TIP & ALONG MARGIN	S 4 # MARGINS ONLY
	0 3 MM. LENGTH (A) 0 6 NUMBER (B)	0 1 8 SPINE INDEX (A × 8)
	1 Spine Index Class: $1 = 020$ $2 = 2140$ $3 = 4160$ $4 = 6180$ $5 = 8110$	
	2 2 2 1 - 80 5 = 81 - 10	0 6 = 101-120
	5. HEADS (For Plant Populations of 593,000 Plants/Hectare):	
	0 3 1 MM. DIAMETER (Primary Heads)	
	Seed Shattering Percentage: 1 = 1-10 2 = 11-30 3 = OVER 30	
	6. SEED:	
	Color: 1 = WHITE 2 = CREAM 3 = GRAY	4 = GRAY WITH WHITE TIP
	9 Color: 5 = GRAY STRIPED 6 = PURPLE STRIPED 7 = BROWN STRIPED	8 = BROWN BLOTCH
	9 - OTHER (Specify) Purple-Brown	
		•
1	White (less than 1/100)	
. 1	4 Hull Type: 1 = NORMAL 2 = THIN-HULLED 3 = STRIPED 4 = REDUCED	
· +	3. 4 MM. WIDTH 7. 6 MM. LENGTH	0 3 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
إ	3. 4 MM. WIDTH 7. 6 MM, LENGTH	0 3 4 GRAMS PER 1000 SEED
	7. SEEDLING VIGOR: (6 weeks after seeding at 2.5 cm. depth with ample moisture for germinati	
,		ion; mean of 20 plants)
- 1	0 8 NUMBER OF NODES 0 2 CM TALL (Soil Starters to Tip)	•

8. COLD RESISTANCE AT	DIFFERENTSIA	GES AND I EN	reka i UK	ES:	V. 200 V		20058	226
2 Rosette: -								
Bolting: 1 =	- 10°C. 2 =	-5°C. 3=0	C. 4=	5° C.	5 = 10° C.			
4 Flowering:						· · · · · · · · · · · · · · · · · · ·		
	Presignation of the second	Dioperation	A Managama VIII vi i in		dseslayRussias			
0 RUST (Specify races) _		O PHYTO	PHTHORA	A ROC	T ROT	0 PYTHIUM	I ROOT ROT	
0 FUSARIUM WILT	O VERTICILLIUM WILT					0 CERCOSE	ORA LEAF SPO	Σ Τ
0 SCLEROTINA STEM	CLEROTINA STEM ROT 3 ALTERNARIA LEAF SPOT				POT	3 ALTERNA	ARIA BUD ROT	
0 BOTRYTIS HEAD RO	EAD ROT 0 RHIZOCTONIA BLIGHT						ÀL BLIGHT	
0 CUCUMBER MOSAIC		0, PHYL	PPY	47 J.		O OTHER (S	Specify)	
10. INSECT AND NEMATO	DE: (0 = Not T	ested; 1 = Susce	ptible; 2 =	Resist	ant)	•		
O GREEN PEACH APHIE		0 LEAF-0	CURL PLU	М АРІ	IID .	0 BLACK BE	EAN APHID	
0 WESTERN FLOWER T	HRIPS	0 LYGUS	BUGS			0 STINKBU	GS ,	
0 ROOT-KNOT NEMATO	DE	O OTHER	(Specify)	• ;				· .
11. INDICATE A VARIETY	THAT MOST CLO	SELY RESEMB	LES THAT			· ,		· · · · · · · · · · · · · · · · · · ·
CHARACTER		RIETY			HARACTER		VARIETY	
	Centennial				odging	Centenr		
	Centennial			<u> N</u>	o, of Branches	Centenr	iiai .	
	Centennial		·					
12. GIVE THE FOLLOWING	- 1		A SIMILAF			L	4 0450 1440	TUDATED 6/
VARIETY	HULL 1/ (%)	PROTEIN ^{2/} (%)	O1L (%)	3/	10DINE 4/ (%)	ACIDS 5/ SATURATED (%)	OLEIC (%)	LINOLEIC (%)
Submitted	13.8	20.0	47.	L	146	8.56	9.14	79.81
Similar	21.9	16.6	40.5	5	. 146	7.72	10.91	79.18

*Hull, protein, and oil percentages expressed for whole undecorticated seed; acids expressed as percentages of oil.

REFERENCES

Centennial Centennial Centennial Centennial Centennial Centennial

- 1. Knowles, P.F. & M.D. Miller. 1965. Safflower. Cal. Ag. Exp. Sta. Circ. 532. 51 p.
- 2. Weiss, E.A. 1971. Castor, Sesame, and Safflower. Barnes & Noble, Inc. N.Y. 901 p.

Nickerson's or any recognized color fan may be used to determine plant colors of described variety.

COMMENTS:

Name of Similar Variety

Whole seed fiber analyses determined by wet chemistry methods performed by Midwest Laboratories, Inc., a certified laboratory of the National Forage Testing Association Whole seed protein determined by carbon/nitrogen analyses

2/

- Oil % determined by Soxhlet extraction determination 3/
- Determined by AOCS Recommended Practice Cd 1c-85 for calculation of iodine value
- 5/ Palmitic (C16:0) plus Stearic (C18:0) determined by gas liquid chromatography
- Determined by gas liquid chromatography of the fatty acid methylesters (AOCS Recommended Procedure Ce 1e-91)

Exhibit D: Optional Descriptive Information

2003 Dryland Safflower

			Signey, N	lontana			V
	Stand	Bloom	Height	Test Wt	Oil Content	Yield	Oil Yield
_Variety	Percent	Date ^{/1}	(cm)	Lbs/bu	Percent	Lbs/A	Lbs/A
491B3842 > Nutrasact	80	19.7	60	39.2	45.2	1655	749
S-541	90	20.7	65	42.5	42.0	1821	765
Centennial	. 77	21.0	69	42.3	42.4	1683	714
Morlin	82	21.3	60	41.7	38.8	1437	558
Finch	90	20.7	69	44.8	36.7	1721	631
Erlin	85	18.7	59	40.2	38.1	1521	580
LSD (0.05)	8.334	0.9754	8.748	0.6227	0.8964	195	74.2
CV (S/mean)	6.203	0.2977	8.77	0.906	1.444	7.307	7.315

Date Seeded: April 24, 2003

1 From July 1

Date Harvested: September 9, 2003

2003 Irrigated Valley Safflower Sidney, Montana

			Sidney, iv	nontana			
	Stand	Bloom	Height	Test Wt	Oil Content	Yield	Oil Yield
Variety	Percent	Date ^{/1}	(cm)	Lbs/bu	Percent	Lbs/A	Lbs/A
<91B38427, Nutragass (85	26.3	70	39.7	48.3	2868	1388
S-541 (GT: 6/8/2005)	92	27.0	70	39.5	42.1	2723	1149
Centennial	87	26.7	70	38.5	41.9	2515	1057
Morlin	93	27.7	69	41.2	40.8	2880	1177
Finch	93	25.3	71	45.0	38.0	3083	1173
Erlin	93	24.7	63	37.8	38.7	2485	967
LSD (0.05)	5.475	0.9172	5.872	1.537	1.108	291.6	128
CV (S/mean)	3.816	2.217	5.397	2.354	1.71	6.033	6.667

Date Seeded: May 15, 2003

^{/1} From July 1

Date Harvested: September 19, 2003

2003 Recrop Safflower Sidney Montana

			Sianey, iv	/iontana			
Variety	Stand Percent	Bloom Date ^{/1}	Height (cm)	Test Wt Lbs/bu	Oil Content Percent	Yield Lbs/A	Oil Yield Lbs/A
<91B38427, Wutrasaff (S-541 (87:6/8/2005)	78	19.0	61	38.3	45.2	994	449
S-541 (8T:6/8/2005)	85	21.0	60	41.7	41.0	1144	471
Centennial	83	21.0	59	41.3	41.6	1157	482
Morlin	88	21.0	53	41.3	37.9	987	375
Finch	88	20.0	60	44.2	36.1	1266	458
Erlin	83	17.3	53	40.2	38.1	1199	457
LSD (0.05)	8.496	1.448	5.667	0.6987	1.318	185.1	79.22
CV (S/mean)	6.331	0.4446	5.95	1.028	2.124	9.998	11.29

Date Seeded: April 24, 2003

1 From July 1

Date Harvested: September 9, 2003

2003 Dryland Safflower Williston, North Dakota

	Flower	Height	Test Wt	Oil Content	Yield
Variety	Date "	(cm)	Lbs/bu	Percent	Lbs/A
91B3842>, 'Nutrasaff' S-541 (ET: 6/8/2005)	82.0	49	38.5	45.0	1525
S-541 (B): 6/8/2005)	83.3	51	42.0	40.9	1787
Centennial	83.7	50	41.1	41.3	1920
Morlin	83.3	44	41.1	38.7	1564
Finch	82.0	50	45.3	36.5	1820
Erlin	81.0	43	38.9	37.7	1551
LSD (0.05)	1.0	6.1	.7	N/A	257.3
CV (S/mean)	.7	8.1	1.1	N/A	9.1

Date Seeded: April 29, 2003

^{/1} From planting date

Date Harvested: September 1, 2003

2003 Dryland Safflower Huntley, Montana

	Flower	Height	Test Wt	Oil Content	Yield
Variety	Date*	(in)	Lbs/bu	Percent	Lbs/A
<91B38427 Wutrasaff' S-541 (BT) 6/8/2005)	204.0	21.2	35.3	42.0	249
S-541 (BT) (A)200 5)	204.0	21.6	35.2	39.1	237
Centennial	205.0	20.3	34.9	37.7	216
Morlin	201.7	18.7	37.4	34.1	241
Finch	203.7	18.0	36.8	29.9	255
Erlin	204.3	19.8	36.4	32.9	275
LSD (0.05)	.9	1.8	2.0	.8	85.8
CV (S/mean)	.3	5.5	3.4	1.4	18.2

^{*}Julian Flower Date (July 23=204)

2002 Dryland Safflower Sidney, Montana

Variety	Stand Percent	Bloom Date ^{/1}	Height (cm)	Test Wt Lbs/bu	Oil Content	Yield Lbs/A	Oil Yield
					Percent		Lbs/A
<91B3842>, Nutrasaff	83	25.0	51	38.3	46.3	1111	493
S-541 (BT: 6/8/2005)	95	25.3	56	38.5	42.3	1055	446
Centennial	80	26.7	53	37.3	43.5	1050	445
Morlin	78	25.7	48	39.5	39.7	979	388
Finch	37	26.3	47	42.8	36.6	727	274
Erlin	83	23.3	43	36.8	39.6	767	305
LSD (0.05)	9.65	0.9921	5.909	1.142	0.5498	197	77.76
CV (S/mean)	7.26	0.2965	7.809	1.75	0.8535	9.765	9.776

Date Seeded: May 18, 2002

1 From July 1

Date Harvested: September 12, 2002

2002 Irrigated Valley Safflower Sidney, Montana

	Stand	Bloom	Height	Test Wt	Oil Content	Yield	Oil Yield
_ Variety	Percent	Date 11	(cm)	Lbs/bu	Percent	Lbs/A	Lbs/A
<91B38427, "Nutrasagg"	90	22.3	61	37.8	40.1	1812	731
S-541 (87:6/8/2605)	- 88	23.7	60	37.2	38.5	1511	584
Centennial	82	23.3	61	34.8	38.0	1345	513
Morlin	85	24.7	53	38.5	35.3	1806	638
Finch	77	22.7	60	41.3	34.7	1699	589
Erlin	90	21.3	50	37.2	35.5	1535	554
LSD (0.05)	7.117	1.004	7.641	1.58	1.063	334.8	133.8
CV (S/mean)	5.048	0.3029	7.891	2.498	1.761	9.922	10.7

Date Seeded: May 14, 2002

^{/1} From July 1

Date Harvested: October 9, 2002

2002 Recrop Safflower Sidney, Montana

Variety	Stand Percent	Bloom Date ^{/1}	Height (cm)	Test Wt Lbs/bu	Oil Content Percent	Yield Lbs/A	Oil Yield Lbs/A
<91B38427, Wutrasacci (BT: 6/8/2005)	78	21.8	51	39.8	40.4	858	348
S-541 (87:6/8/2005)	78	23.0	50	42.3	39.1	1136	444
Centennial	66	23.5	50	42.1	39.7	1100	438
Morlin	75	24.0	47	40.8	35.8	1053	377
Finch	50	22.3	43	46.4	33.9	800	273
Erlin	55	21.3	43	42.0	36.8	643	239
LSD (0.05)	12.89	1.636	6.370	0.7673	0.7776	262.5	102.4
CV (S/mean)	12.95	0.5741	9.723	1.293	1.512	18.47	19.75

Date Seeded: May 2, 2002

1 From July 1

Date Harvested: September 12, 2002

2002 Dryland Saffiower Williston, North Dakota

Variety	Flower Date ^{/1}	Height (cm)	Test Wt Lbs/bu	Oil Content Percent	Yield Lbs/A
<91B38427, 'Nutrasaff'	77.0	39	39.2	43.9	1078
S-541 (87:6/8/2005)	77.7	43	38.8	40.7	1236
Centennial	77.7	39	37.9	41.7	1046
Morlin	76.0	31	39.9	38.1	952
Finch	75.3	. 38	44.3	36.3	994
Erlin	72.3	34	38.3	36.9	789
LSD (0.05)	1.3	6.0	.9	.6	232.3
CV (S/mean)	1.1	9.6	1.3	1.0	12.5

Date Seeded: May 4, 2002

1 From planting date

Date Harvested: September 13, 2002

2002 Dryland Safflower Havre, Montana

	Stand	Flower	Height	Test Wt	Oil Content	Yield	Oil Yield
Variety	Percent	Date /1	(in)	Lbs/bu	Percent	Lbs/A	Lbs/A
<91B38427, Nutrasacci (BT: 6/8/2005)	60	213.7	19.63	39.5	42.8	1586	679
S-541 (B): 6/8/2005)	64	213.7	20.79	41.5	40.3	1849	744
Centennial	46	218.0	19.24	40.3	40.5	1745	705
Morlin	55	218.0	18.39	38.9	36.7	1840	676
Finch	42	215.3	19.00	15.1	35.2	1384	487
Erlin	41	211.7	15.76	41.5	37.7	1262	476
LSD (0.05)	12.09	2.04	2.25	10.21	.85	277.70	N/A
CV (S/mean)	14.14	.58	7.91	15.68	1.44	10.24	N/A

^{/1} Julian Flower Date

2001 Dryland Safflower Sidney, Montana

N	Stand	Bloom	Height	Test Wt	Oil Content	Yield	Oil Yield
Variety	Percent	Date ^{/1}	(cm)	Lbs/bu	Percent	Lbs/A	Lbs/A
<91B38427, Nutrasact	92	25.7	77	35.5	40.1	669	269
S-541 (BT: 6/8/2005)	88	27.0	75	35.4	38.9	657	256
Centennial	82	27.3	76	33.2	37.5	329	124
Morlin	78	28.3	71	36.0	33.0	251	83
Finch	83	26.7	77	36.1	31.3	588	185
Erlin	85	23.7	69	31.3	27.0	206	56
LSD (0.05)	14.57	1.528	9.970	1.335	1.345	200.6	80.82
CV (S/mean)	10.50	1.217	8.401	2.306	2.265	18.96	20.75

Date Seeded: May 10, 2001

/1 From July 1

Date Harvested: September 10, 2001

2001 Irrigated Valley Safflower Sidney, Montana

· ·	The second second second						
Variety	Stand Percent	Bloom Date ^{/1}	Height (cm)	Test Wt Lbs/bu	Oil Content Percent	Yield Lbs/A	Oil Yield Lbs/A
<91B38427, Nutrasass (87.6/8/2005)	, 90	21.3	74	32.7	38.4	863	331
S-541 (B): 6/8/3000	90	22.7	86	31.1	34.1	565	192
Centennial	82	23.3	83	30.4	33.6	293	98
Morlin	88	23.3	72	33.3	30.8	590	182
Finch	92	22.3	82	34.6	30.4	873	265
Erlin	83	20.0	69	30.8	28.8	465	134
LSD (0.05)	7.166	1.157	9.451	1.107	1.513	250.6	91.94
CV (S/mean)	5.030	.9656	7.438	2.058	2.704	17.89	19.08

Date Seeded: May 15, 2001

Trom July 1

Date Harvested: September 10, 2001

2001 Recrop Safflower Sidney, Montana

	Stand	Bloom	Height	Test Wt	Oil Content	Yield	Oil Yield
Variety	Percent	Date //	(cm)	Lbs/bu	Percent	Lbs/A	Lbs/A
<91B3842>, Nutrasaff	′ 88	24.0	57	37.6	40.5	626	236
S-541 (BT: 6/8/2005)	88	25.7	56	37.3	36.0	750	270
Centennial	77	27.3	54	36.9	38.0	367	129
Morlin	.87	26.0	49	38.3	31.6	359	114
Finch	78	24.3	52	38.1	32.3	521	156
Erlin	83	23.3	46	31.4	26.8	209	56
LSD (0.05)	6.551	1.265	6.196	1.809	.8035	146	53.28
CV (S/mean)	4.928	1.020	7.264	2.967	1.457	14.52	15.59

Date Seeded: May 10, 2001

1 From July 1

Date Harvested: September 10, 2001

2001 Dryland Safflower Williston, North Dakota

<u></u>	V V I	maton, nort	II Dakula		
	Flower	Height	Test Wt	Oil Content	Yield
Variety	Date ^{/1}	(cm)	Lbs/bu	Percent	Lbs/A
491B3842>, Nutrasace S-541 (87: 6/8/2005)	79	65	37.8	42.2	1332
S-541 (BT: 6/8/2005)	81	64	38.0	39.2	1469
Centennial	81	58	37.0	38.7	1075
Morlin	80.3	53	38.2	35.8	1095
Finch	79	61	40.8	31.7	1404
Erlin	77	63	34.9	32.3	855
LSD (0.05)	1.1	9.5	.9	.9	169.9
CV (S/mean)	.9	10.0	1.4	1.6	7.9

Date Seeded: May 3, 2001

/1 From planting date

Date Harvested: September 5, 2003

2000 Dryland Safflower - 4 row Sidney Montana

	A STATE OF THE STA		Sidiley, W	ontana	The State of the North Control	the second of the second	
Variety	Stand Percent	Bloom Date ^{/1}	Height (cm)	Test Wt Lbs/bu	Oil Content Percent	Yield Lbs/A	Oil Yield Lbs/A
<91B3842>, Nutrasact		20.7	56	39	45.2	1958	868,
Centennial (ठा: ४/४/२४८५)	80	23.7	55	40.3	43.3	1578	675
Morlin	93	22.7	54	40.5	40.2	1725	693
Finch	90	20.0	57	44.5	37.0	2145	795
Erlin	85	17.7	53	38.5	38.4	1486	571
LSD (0.05)	6.339	1.451	9.759	.6073	1.322	191.5	79.4
CV (S/mean)	4.552	1.034	10.73	.9140	2.164	6.478	7.172

Date Seeded: April 27, 2000 ^{/1} From July 1

Date Harvested: September 8, 2000

2000 Valley Safflower - 3 row Sidney, Montana

	Stand	Bloom	Height	Test Wt	Oil Content	Yield	Oil Yield
	Percent	Date /	(cm)	Lbs/bu	Percent	Lbs/A	Lbs/A
<91B3842> 'Nutrasaff'	88	22.0	70	34.9	41.0	1272	522
Centennial (BT: 6/8/2005)	85	23.7	65	34.9	37.1	846	313
Morlin	92	21.0	72	39.2	34.1	1724	588
Finch	90	21.3	65	32.7	33.6	1357	458
Erlin	92	18.0	63	33.4	33.3	1142	380
LSD (0.05)	7.11	1.33	8.551	2.040	2.679	390.3	140.7
CV (S/mean)	4.90	1.00	7.498	3.618	5.018	15.78	17.43

Date Seeded: May 2, 2000 ^{/1} From July 1

Date Harvested: September 7, 2000

2000 Valley Safflower - 4 row Sidney, Montana

Stond	Dloom	المنماط	T434/4	Oil Contout	V: II	09.17.11
and the second second		_			· ·	Oil Yield
Percent	Date '	(cm)	Lbs/bu	Percent	Lbs/A	Lbs/A
90	19.3	68	34.7	40.6	1527	621
75	22.7	66	33.4	36.3	691	251
77	22.3	74	33.8	33.3	1374	458
87	19.7	71	37.8	33.6	1742	586
82	17.0	64	32.7	32.1	1124	363
6.984	1.222	5.880	1.845	1.624	335.1	119.5
5.021	.9289	5.067	3.380	3.089	12.66	14.02
	75 77 87 82 6.984	Percent Date 71 90 19.3 75 22.7 77 22.3 87 19.7 82 17.0 6.984 1.222	Percent Date /1 (cm) 90 19.3 68 75 22.7 66 77 22.3 74 87 19.7 71 82 17.0 64 6.984 1.222 5.880	Percent Date /1 (cm) Lbs/bu 90 19.3 68 34.7 75 22.7 66 33.4 77 22.3 74 33.8 87 19.7 71 37.8 82 17.0 64 32.7 6.984 1.222 5.880 1.845	Percent Date /1 (cm) Lbs/bu Percent 90 19.3 68 34.7 40.6 75 22.7 66 33.4 36.3 77 22.3 74 33.8 33.3 87 19.7 71 37.8 33.6 82 17.0 64 32.7 32.1 6.984 1.222 5.880 1.845 1.624	Percent Date /1 (cm) Lbs/bu Percent Lbs/A 90 19.3 68 34.7 40.6 1527 75 22.7 66 33.4 36.3 691 77 22.3 74 33.8 33.3 1374 87 19.7 71 37.8 33.6 1742 82 17.0 64 32.7 32.1 1124 6.984 1.222 5.880 1.845 1.624 335.1

Date Seeded: May 2, 2000 ^{/1} From July 1

Date Harvested: September 8, 2000

2000 Recrop Safflower Sidney, Montana

to the second se	the state of the s			•			• "
	Yield Lbs/A	Oil Content Percent	Test Wt Lbs/bu	Height (cm)	Bloom Date ^{/1}	Stand Percent	Variety
356	819	43.4	39.2	43	14.3	eff 93	<91B38427, Nutrasaff
1.1.1	1032	42.1	41.2	46	14.7	2005) 90	Centennial (61:6/8/200
247	654	37.8	39.9	35	14.7	92	Morlin
251	678	36.9	45.1	39	24.7	81	Finch
252	671	37.5	39.8	36	24.7	79	Erlin
172.3	428.6	1.25	.779	8.09	5.54	1.59	LSD (0.05)
35.57	32.37	2.11	1.16	12.59	3.78	1.19	CV (S/mean)
	654 678 671 428.6	37.8 36.9 37.5 1.25	39.9 45.1 39.8 .779	35 39 36 8.09	14.7 24.7 24.7 5.54	92 81 79 1.59	Morlin Finch Erlin LSD (0.05)

Date Seeded: April 25, 2000 ^{/1} From July 1

Date Harvested: September 8, 2000

2000 Dryland Safflower Williston, North Dakota

Variety	Flower Date 11	Height (cm)	Test Wt	Oil Content Percent	Yield Lbs/A
<91B38427 : Nutrasaff:	81.0	54	38.2	40.4	1459
Centennial (87:6/8/2005)	83.7	53	39.6	38.3	1355
Morlin	82.3	50	40.5	36.4	1340
Finch	79.3	47	42.6	32.6	1719
Erlin	78.0	39	37.5	33.7	1130
LSD (0.05)	1.3	6.5	.9	1.3	216.9
CV (S/mean)	1.0	8.6	1.3	2.2	9.0

Date Seeded: May 1, 2000

1 From planting date

Date Harvested: September 13, 2000

2000-2003 Average Dryland Safflower Sidney, Montana

	Stand	Bloom	Height	Test Wt	Oil Content	Yield	Oil Yield
Variety	Percent	Date ^{/1}	(cm)	Lbs/bu	Percent	Lbs/A	Lbs/A
<91B38427, Nutrasaf	ç′, 85.8	22.8	61	38.0	43.5	1348	595
Centennial (87:6/8/20)	<i>95)</i> 79.8	24.7	63	38.3	41.2	1160	490
Morlin	82.8	24.5	58	39.4	37.9	1098	431
Finch	75.0	23.4	62	42.1	35.7	1295	471
Erlin	84.5	20.9	56	36.7	35.8	995	378
LSD (0.05)	9.723	1.2	8.596	0.926	1.028	196.025	78.045
CV (S/mean)	7.128	0.7	8.927	1.469	1.682	10.627	11.253

^{/1} From July 1

2000-2003 Average Irrigated Valley Safflower Sidney, Montana

			•	* *.	•		
Variety	Stand Percent	Bloom Date ^{/1}	Height (cm)	Test Wt Lbs/bu	Oil Content Percent	Yield Lbs/A	Oil Yield Lbs/A
<91B3842>, Nutrasaff		22.3	68	36.2	41.9	1768	768
Centennial (37: 6/8/2005,	81.5	24.0	7 0	34.3	37.5	1211	480
Morlin	85.8	24.5	67	36.7	35.1	1663	614
Finch	87.3	22.5	71	39.7	34.2	1849	653
Erlin	87.0	20.8	62	34.6	33.8	1402	505
LSD (0.05)	6.685	1.1	7.211	1.517	1.327	303.025	118.31
CV (S/mean)	4.729	1.1	6.448	2.572	2.316	11.626	12.617

^{/1} From July 1

2000-2003 Average Recrop Safflower Sidney, Montana

Variety	Stand Percent	Bloom Date ^{/1}	Height (cm)	Test Wt	Oil Content Percent	Yield Lbs/A	Oil Yield Lbs/A
<91B3842>, 'Nutrasacc'	84.3	19.8	53	38.7	41.7	824	347
Centennial (৪ন:6/৪/১০০১)	79.0	21.6	52	40.4	39.6	914	372
Morlin	85.5	21.4	46	40.1	35.8	763	278
Finch	74.3	22.8	48.5	43.5	34.2	816	285
Erlin	75.0	21.7	44.5	38.4	34.8	681	251
LSD (0.05)	7.382	2.5	6.581	1.014	1.037	255.55	101.8
CV (S/mean)	6.349	1.5	8.882	1.61	1.80	18.8395	20.55

^{/1} From July 1

2000-2003 Average Dryland Safflower Williston, North Dakota

Variety	Flower Date ^{/1}	Height (cm)	Test Wt Lbs/bu	Oil Content Percent	Yield Lbs/A
<91B3842 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	79.7	52	38.4	42.9	1349
Centennial (BT: 6/8/2005)	81.5	50	38.9	40.0	1349
Morlin	80.5	45	39.9	37.3	1238
Finch	78.9	49	43.3	34.3	1484
Erlin	77.1	45	37.4	35.2	1081
LSD (0.05)	1.18	7.03	0.85	Ñ/A	219.10
CV (S/mean)	0.93	9.08	1.28	N/A	9.63

⁷¹ From planting date

Nutrasaff (87:6/8/2005) <91B3842/(2002-2003) Breeders Seed Fatty Acid Composition

SAMPLE NAME	C16:0 2.6	C18:0 4.5	C18:1 4.7	C18:2 11.2	C20:0	C22:0	C24:0	% SAT
2003 Huntley	7.1	2.2	11.3	77.2	0.3	0.3	0.1	10.0
2003 Sidney	6.9	2.2	10.0	79.1	0.3	0.2	0.1	9.8
2002 Sidney	6.7	1.9	9.6	79.3	0.3	0.2	0.1	9.3
Average	6.9	2.1	10.3	78.5	0.3	0.2	0.1	9.7

Protein and Oil Comparisons of 91B3842 (Nutrasaff) Safflower to Centennial and Finch Safflower

	and i non canower						
		% Meal ¹	% Seed ²				
Variety	<u>Year</u>	Protein	—— Oil ——				
(er. 6/8/2005) (591B38427)	2003-Dryland	34.0	47.1				
Finch	2003-Dryland	22.3	36.4				
Centennial	2003-Dryland	23.7	40.5				
LSD (.05)		3.90	5.13				
CV SE/Mean		3.7	3.2				

¹⁾ By C/N analysis (Leco)

²⁾ By Soxhlet extraction determination

			% Meal ¹	% Seed ²	Whole seed	Whole seed	Meal
_	Variety	Year	Protein	Oil	Protein % ³	Fiber % ³	Protein % ⁴
	(<91B3842>) Nutrasacci nos) Finch	2003-Irrigated	32.8	52.0	20	13.8	41.7
(BT:6/8/20	Finch	2003-Irrigated	24.9	37.7	15.9	24.2	25.5
_	Centennial	2003-Irrigated	27.4	39.2	16.6	21.9	27.3
: -	LSD (.05)		4.83	2.78			
٠.	CV SE/Mean	•	4.3	1.7			

Protein and Oil Content of 91B3842 (Nutrasaff) Breeders Seed (2002-2003)

		% Meal ¹	% Seed ²	Whole seed	Whole seed	Meal
Location	Year	Protein	Oil	Protein % ³	Fiber % ³	Protein %⁴
Sidney	2002-Irrigated	39.3	48.4	NA	NA	NA
Sidney	2003-Irrigated	35.9	51.1	19.5	14.6	39.9
Huntley	2003-Dryland	38.6	49.6	20.6	11.1	40.9

Disease Rating Irrigated Valley Safflower Sidney, Montana

	J /			
Variety	1999	2001	2003	Mean
91B3842>, Nutrasaff (BT:6/8/2005)	3.33	4.0	2.38	3.24
Centennial	5.33	4.7	2.63	4.22
Morlin	3.67	4.0	2.38	3.35
Finch	3.67	3.3	1.63	2.87
Erlin	5.67	5.3	2.75	4.57
LSD (0.05)	1.89	1.69	1.07	1.55
CV (S/mean)	26.67	14.11	29.46	23.41

Relative Disease Rating, 9=most susceptible, 1=least susceptible Principal disease noted was Alternaria Leaf Spot Incited by Alternaria carthami

¹⁾ By C/N analysis (Leco)
2) By Soxhlet extraction determination
3) Midwest Laboratories, Inc.
4) Based on weight after subtraction of oil %

¹⁾ By C/N analysis (Leco)
2) By Soxhlet extraction determination

³⁾ Midwest Laboratories, Inc.
⁴⁾ Based on weight after subtraction of oil %

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE

EXHIBIT E STATEMENT OF THE BASIS OF OWNERSHIP

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

STATEMENT OF THE BASIS OF OWNERSHIP		
1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
Montana State University	91B3842	Nutrasaff
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (Include area code) 2752	6. FAX (Include area code)
Technology Transfer Office	(406) 994- 2752(67:6/8/2005)	(406) 994- 2893- (BT: 6/8/2055)
-900 Technology Blvd, Suite A 304 Montana Hall -Bozeman, MT 59718-P.O. Box 172460 Bozeman, MT 59717 L8768/2005 per applicant's authorization)	7. PVPO NUMBER 2005 OT	0036
8. Does the applicant own all rights to the vallety? Mark an "X" in the	e appropriate block. If no, please explai	n. YES NO
9. Is the applicant (individual or company) a U.S. national or a U.S. b	ased company? If no, give name of co	ountry. YES NO
10. Is the applicant the original owner? YES	NO If no, please answer one	of the following:
a. If the original rights to variety were owned by individual(s), is (
	NO If no, give name of count	y .
b. If the original rights to variety were owned by a company(ies),	, is (are) the original owner(s) a U.S. bas	
استسا		•

11. Additional explanation on ownership (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed):

Nutrasaff safflower originated and was developed through breeding and selection research conducted by Dr. Jerald W. Bergman, Safflower Breeder, for the Montana Agricultural Experiment Station Research Project No. MONB00558 Accession No. 0174701 Breeding and Improvement of Oilseed Crops for Eastern Montana.

All rights to 'Nutrasaff' have been assigned to the Office of the Vice President for Research and Technology Transfer serving as the technology transfer agency for the Montana Agricultural Experiment Station.

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

- 1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
- If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
- 3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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